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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/575,933

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EXAMINER

STUART, COLIN W

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/575,933	Applicant(s) KREUTZMANN ET AL.	
	Examiner COLIN W. STUART	Art Unit 3771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 June 2011.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on ____; the restriction requirement and election have been incorporated into this action.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 5) ☒ Claim(s) 1-4,6-11,13 and 14 is/are pending in the application.
- 5a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 6) ☐ Claim(s) ____ is/are allowed.
- 7) ☒ Claim(s) 1-4,6-11,13 and 14 is/are rejected.
- 8) ☐ Claim(s) ____ is/are objected to.
- 9) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 10) ☐ The specification is objected to by the Examiner.
- 11) ☒ The drawing(s) filed on 14 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 12) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

1. This office action is in response to the amendment filed 6/3/11. As directed by the amendment, claims 1 and 10 have been amended, claims 5 and 12 have been cancelled, and claims 13 and 14 have been added. As such, claims 1-4, 6-11, and 13-14 are pending in the instant application.

Allowable Subject Matter

2. Claim 9 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 1-4, 10-11, and 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tseng (2004/0227011) in view of Pollet et al. (2004/0089292).

In regards to claim 1, Tseng shows an inhalation therapy device which includes a nebulizing chamber (space between reference numeral 1 and 22; see Fig. 4), an aerosol generator (via 213 see para. 0011 ln. 15-18; note that element 213 is the connection to a air compressing device which generates the aerosol), which is arranged such that it releases an aerosol into the nebulizing chamber (see Fig. 4 and para. 0011), and which includes a nozzle element 211 and at least one channel (see Fig. 4, channel

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defined by area between elements 211 and 1) extending between the nozzle element and a member 1 (see Fig. 4), wherein the member is removable to expose portions of the at least one channel formed by the nozzle element (see para. 0003 ln. 3-4 and Fig. 3). Tseng is silent as to the nozzle element including at least a first part with outlet and a second part, the first part including a more resilient material than the second part and the first part being attached to the second part where the first part tapers further than the second part with a cross-section of the first part decreasing to a deformable nozzle tip. However, Pollet teaches an inhalation therapy device which includes a nozzle element (see Pollet Fig. 9) which includes at least a first part (Pollet 73) with a nozzle outlet (see 71 Pollet Fig. 9) and a second part (Pollet 72), where the first part is made of a more resilient material than the second part (see Pollet para. 0059 ln. 1-5) and the first part is attached to the second part of the nozzle (see Pollet Fig. 9). The Pollet nozzle element also includes that the first part tapers further than the second part (see Pollet Fig. 9; note that first part 73 tapers further in a longitudinal direction as shown) with the cross-section of the first part decreasing to a deformable nozzle tip (see Pollet Fig. 9; tip of 73 is made of elastomer material, Pollet para. 0059 ln. 1-5). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Tseng device's nozzle element to include a first part and a second part where the first part is made out of a more resilient material than the first as taught by Pollet in order to provide that "the spray pattern which depends on the orifice geometry is not adversely affected" (Pollet para. 0059 ln. 9-10).

In regards to claim 2, the modified Tseng the modified Tseng device includes a first part of a nozzle element which has a cross-section which tapers further than that of the second part of the nozzle element (see Pollet Fig. 9).

In regards to claim 3, the modified Tseng device's first part of the nozzle element is made of silicone rubber or a thermoplastic elastomer (see Pollet para. 0059 In. 4-5).

In regards to claim 4, the modified Tseng device's first and second parts of the nozzle element include a two-component structure (see Pollet Fig. 9) having the first part of the nozzle element molded on the second part (see Pollet para. 0059 In. 1-5).

In regards to claim 10, Tseng shows an inhalation therapy device which includes a nebulizing chamber (space between reference numeral 1 and 22; see Fig. 4), and an aerosol generator (213 see para. 0011 In. 15-18; note that element 213 is the connection to a air compressing device which generates the aerosol), including a nozzle element (211, Fig. 4) arranged such that the nozzle element releases an aerosol into the nebulizing chamber (see Fig. 4 and para. 0011), and which includes a nozzle element 211. Tseng is silent as to the nozzle element including at least a first part with outlet, the first part being made of a more resilient material than a member of the device to which the nozzle element is attached, where the first part forms a deformable resilient nozzle tip tapering from the member. However, Pollet teaches an inhalation therapy device which includes a nozzle element (see Pollet Fig. 9) including at least a first part (Pollet 73) being made of a more resilient material than a member (Pollet 72) of the device to which the nozzle element is attached (see Pollet para. 0059 In. 1-5), where the first part forms a deformable resilient nozzle tip tapering from the member (see

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Pollet Fig. 9; tip of 73 is made of elastomer material, Pollet para. 0059 In. 1-5, which tapers from the member 72). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Tseng device's nozzle element to include at least a first part made of a more resilient material than a member on which the nozzle element is molded to or attached in order to provide that "the spray pattern which depends on the orifice geometry is not adversely affected" (Pollet para. 0059 In. 9-10).

In regards to claim 11, the modified Tseng device's first part of the nozzle element is made of silicone rubber or a thermoplastic elastomer (see Pollet para. 0059 In. 4-5).

In regards to claims 13 and 14, the modified Tseng device's first part consists of a material resuming original geometry upon deformation (see Pollet para. 0059 In. 4-5, note that the elastomer material of the first part exhibits elastic deformation).

5. Claims 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tseng (2004/0227011) and Pollet et al. (2004/0089292) as applied to claim 1 above, and further in view of Dobbeling et al. (6,045,058).

In regards to claim 6, the modified Tseng device teaches all the limitations as discussed above, but is silent as to the nozzle having a third part containing the nozzle outlet. However, Dobbeling teaches an inhalation therapy device which includes a nozzle element having a first (Dobbeling 31), second (Dobbeling 35), and third (Dobbeling 32; Fig. 1) parts with the third part containing the nozzle outlet. It would

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have been obvious to one of ordinary skill in the art at the time the invention was made to modify the modified Tseng device's nozzle element to include a third part with a nozzle outlet as taught by Dobbeling in order to provide that "good stability of the full jet is achieved" (see Dobbeling col. 5 ln. 30-31).

In regards to claim 7, the modified Tseng device, as modified above in rejection of claim 6, includes a third part of the nozzle element which has a cross-section which tapers further than that of the first part of the nozzle element (see Fig. 1 of Dobbeling).

In regards to claim 8, the modified Tseng device teaches molding structures (see Pollet para. 0059 ln. 1-5) and although the modified Tseng device is silent as to the third part explicitly being molded to the first part, one of ordinary skill in the art at the time the invention was made would have found it obvious to mold the first and third parts of the nozzle outlet together as this type of molding to form parts of a nozzle element is well known in the art (see Pollet para. 0059 ln. 1-5).

Response to Arguments

6. Applicant's arguments filed 6/3/11 have been fully considered but they are not persuasive.

The applicant's argument that the prior art does not teach a nozzle element with a first part of more resilient material than a second part where the first part tapers further than the second part (see page 5-6 of response) is not well-taken. The nozzle element with first and second parts as claimed is shown in Fig. 9 of Pollet and the first part 73 tapers further than the second part in a longitudinal direction as shown. The first

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part 73 also forms a deformable tip towards the outlet 71 due to the elastomer material which forms the first part (see Pollet para. 0059 ln. 4-5).

The applicant's argument that the Dobbeling reference does not teach any specific elasticity of the nozzle components and that the Dobbeling reference would not be looked to as it relates to a nozzle for a combustion system is not well-taken. The Dobbeling reference was relied upon for the teaching of three nozzle parts and their respective shape/taperings and not relied upon for any teaching of elasticity. The Dobbeling reference would also be looked to by one of ordinary skill in the art as it relates to a nozzle and despite the nozzle being intended for a different purpose, the three references relate to nozzle structures and would have been looked to by one of ordinary skill for combination.

Conclusion

7. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to COLIN W. STUART whose telephone number is (571)270-7490. The examiner can normally be reached on M-Thr 8:00-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Justine Yu can be reached on 571-272-4835. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/COLIN W STUART/
Examiner, Art Unit 3771

/Justine R Yu/
Supervisory Patent Examiner, Art Unit 3771